# Annual Budget Statement 2025

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# **Acknowledgement of Country**

Infrastructure Australia proudly acknowledges the Traditional Owners and Custodians of Australia, and their continuing connections to the land, waters, and communities. We pay our respects to them and to their Elders past and present. In preparing for the future of our infrastructure, we acknowledge the importance of looking beyond the immediate past to learn from Aboriginal and Torres Strait Islander peoples' unique history of land management and settlement, art, culture, and society that began over 65,000 years ago. As part of Infrastructure Australia's commitment to reconciliation, we will continue to develop strong, mutually beneficial relationships with Aboriginal and Torres Strait Islander partners who can help us to innovate and deliver better outcomes for Aboriginal and Torres Strait Islander communities, recognising their expertise in improving quality of life in their communities.

A note from the artist:

"Through sharing culture, we can create a sense of belonging, by connecting to the land we stand on. This connection of people and our communities is shown through connecting campfires. These being places we sit, yarn, and share knowledge. The Infrastructure Australia values - expressed by the colours blue, green, orange, purple and teal - weave through the artwork to represent the opportunities and benefits for our communities. Under this sits our rivers, lakes, oceans, and waterways. Water being the giver and supporter of life and flows through us all. I see the reconciliation journey as the water along the path to benefiting our people. Around our waterways I've shown our traditional infrastructure. Our connections and songlines. The systems set up by the First Peoples of this place that we aim to weave into the modern landscape."





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## Introduction

Infrastructure Australia is the Australian Government's independent adviser on nationally significant infrastructure investment planning and prioritisation. Sectors within Infrastructure Australia's remit comprise transport, energy, communications, water and social infrastructure.<sup>1</sup>

#### **Purpose of this statement**

This document delivers on the requirement of section 5DB of the *Infrastructure Australia Act 2008* that Infrastructure Australia must give to the Minister and table in both Houses of Parliament each financial year:

- An annual budget statement to inform the annual Commonwealth budget process on infrastructure investment; and
- An annual performance statement on the performance outcomes being achieved by states, territories and local government authorities in relation to the infrastructure investment program and existing project initiatives funded by the Commonwealth.

# The Annual Budget Statement 2025

This second edition of the Annual Budget Statement includes:

- Proposed national infrastructure investment priorities, developed from Australian, state and territory plans and investments, and consultation with stakeholders.
- Considerations for infrastructure investment prioritisation and delivery in the short, medium and long term, including infrastructure market capacity constraints and reducing emissions from infrastructure.

<sup>1</sup> Social infrastructure is generally considered in the context of broader place or region-based infrastructure planning.

# Infrastructure Australia proposes national infrastructure priorities to inform Australian Government investment

The national infrastructure priorities proposed represent Infrastructure Australia's view of the current, most significant focus areas for infrastructure investment at a national level in the short, medium and long term. The priorities (in Figure 1 and discussed further below) address and support nationally significant infrastructure needs and opportunities and have been developed based on:

- Structured analysis of infrastructure issues, needs, gaps and priorities identified in recent published state and territory infrastructure strategies and plans
- Extensive engagement with jurisdictions on current and emerging priorities for infrastructure planning and delivery investment.

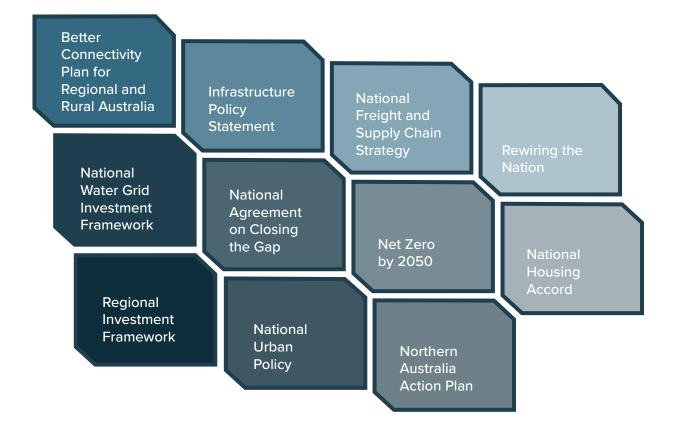
These national infrastructure priorities are not intended to be exhaustive. Infrastructure Australia also expects these national infrastructure investment priorities to evolve in future statements based on further engagement, updated analysis and as infrastructure investments progress.

Figure 1: Proposed national infrastructure investment priorities

	High Productivity Freight Networks	Enhancing the capacity, interoperability and resilience of nationally-important regional freight corridors and networks for higher productivity rail and road freight
	Ports Capacity and Connectivity	Increasing national ports capacity and strengthening import-export supply chains with last mile freight and intermodal connections for ports and port precincts
0=0	High-Capacity Transport for Growing Cities	Building safe, efficient and city-shaping transport for our fast-growing urban populations, and unlock priority growth areas and precincts for housing and development
	Secure, Sustainable Water for Growth	Providing secure, climate-resilient water and wastewater capacity in cities and regions to support housing growth and increasing demands for water-intensive industries
(de)	Delivering Net Zero and a Clean Energy Economy	Delivering large-scale renewable generation, storage and transmission, including enabling infrastructure, and unlock national economic opportunities from the net zero transition

The priorities set out in this Annual Budget Statement support policies and initiatives of the Australian Government, including but not limited to those identified in Figure 2.

**Figure 2:** Examples of Australian Government policies and initiatives aligned to national priorities for infrastructure investment





#### HIGH PRODUCTIVITY FREIGHT NETWORKS

National networks need to be efficient and interoperable for highproductivity rail and road freight, addressing outstanding gaps on key regional and interstate routes

Our national freight networks need to be fitfor-purpose to support a growing freight task and higher productivity vehicles, withstand climate impacts and provide efficient interstate movements on an interoperable network. In urban areas, it is an ongoing priority to manage the twin challenges of growing freight and commuter traffic.

Maximising the productivity and resilience of our supply chains will be critical for Australia to continue to prosper and remain globally competitive. An efficient freight network is also crucial to the achievement of other policy objectives such as road safety and net zero. We also need to ensure that Australia's freight can be moved using the mode most suited to the task.

Increasing the productivity of Australia's freight networks requires an integrated approach, across infrastructure, technology, data and policy. There are a range of initiatives underway by Australian governments focused on improving freight productivity across this spectrum including targeted infrastructure investments, increases to higher productivity vehicle access and the use of technology including higher capacity signalling, smart motorways and secure access to data.

Improving freight movements on our interstate rail network is integral to national productivity. In addition to the significant Inland Rail project spanning Victoria, New South Wales and Queensland, priorities include **improving national rail network connectivity and interoperability.** This includes interstate freight and passenger rail networks that have interoperable physical infrastructure and digital signalling and communications systems. It also includes improving regional rail freight access and capacity, and connecting growing regional industries to markets.

Nationwide, improvements to the road freight network include continuing substantial upgrades and tackling critical pinch points for heavy vehicles on key strategic and interstate regional and remote road corridors, such as the Bruce Highway in Queensland, the Great Northern Highway in Western Australia, and the Stuart, Eyre and Sturt Highways across South Australia, the Northern Territory, Victoria and New South Wales.

Any new investments in the national freight network will build on significant existing investments in project planning and delivery by the Australian, state and territory governments. This includes road investments such as the Coffs Harbour Bypass in New South Wales, the Inland Freight Route Upgrades in Queensland, Great Northern Highway in Western Australia, the Nationwide Freight Highway Upgrade Program in South Australia and the Tanami Road in the Northern Territory.

There are also substantial rail investments underway such as the Murray Basin Freight Rail in Victoria, through the Australian Rail Track Corporation and Freight Rail Revitalisation in Tasmania.



#### PORTS CAPACITY AND CONNECTIVITY

#### Increasing national ports capacity, common-user infrastructure, freight hubs and land transport connections is vital to Australia's trade and competitiveness

Ports are essential to the national economy and Australia needs increased port capacity and common-user infrastructure across the country to facilitate demand, trade and growth, especially to support priority national industries. Examples include ports in Perth and Darwin, Burnie in Tasmania and east coast ports such as Brisbane, Townsville, Newcastle and Kembla.

Our ports must also be well-connected to provide efficient, integrated import and export supply chains. Intermodal freight terminals, logistics hubs and rail and road freight connections to major ports in places such as Brisbane, Melbourne, Sydney, Darwin and Adelaide are needed to serve growing access and capacity demands for rail and heavy vehicle access to export facilities. Enhancing east-west land transport connectivity is vital

for ports along Australia's eastern seaboard, from Townsville and Gladstone in Queensland to connectivity between Western Sydney, Newcastle, Port Botany and Port Kembla in New South Wales. Elsewhere, freight rail network and/or road capacity improvements will be required to support Westport in Kwinana, ports such as Burnie in Tasmania, and major industry development at ports such as Adelaide, including AUKUS at Osborne.

The Australian, state and territory governments are already investing in planning and delivery of improvements to ports capacity and connectivity. This includes planning for Westport and for road access improvements to Darwin Port, as well as delivering improved heavy vehicle access for Port of Gladstone. Governments are also investing around ports to unlock opportunities in clean energy industries, such as green hydrogen and critical minerals. This is discussed further below under *Delivering Net Zero and a Clean Energy Economy*.



HIGH-CAPACITY TRANSPORT FOR GROWING CITIES

Rapidly growing major cities, suburbs and activity centres require transformative investments in highcapacity mass transit networks and major corridors

Investments in high-capacity public transport and road networks are needed to support major cities, unlock priority areas for housing and employment growth in cities and suburbs and address existing congestion, alongside measures to improve efficiency of existing networks and promote modal shift.

Passenger rail capacity and connectivity are at the heart of growing our cities and catering for future growth. This includes **major city-shaping rail mega projects** across Sydney, Melbourne, Brisbane and Perth. **Modernising rail signalling and digital train control systems** is also a key step to increasing urban rail capacity, safety and interoperability for passengers and freight for Brisbane, Sydney, Melbourne, Perth and Adelaide.

# Upgrades and extensions to existing rail networks are important to service growing activity centres and suburbs.

This includes strategic corridors between Brisbane, the Gold Coast and Sunshine Coast in Queensland, enhancing rail links to Melbourne's north and west growth areas and speeding up intercity connections, such as High Speed Rail and Sydney-to-Canberra rail connections.

## The removal of level crossings from congested urban transport networks

supports improved productivity and increased safety, by enabling more efficient road and rail movements and reduced conflict. While relatively few level crossings remain in places such as metropolitan Sydney, other major capital cities including Greater Melbourne,

Brisbane and South East Queensland, Perth and Adelaide all identify a need for removing level crossings in priority locations across their respective networks.

Upgrades to the capacity of major road corridors and networks remain essential in ensuring well-functioning cities into the future. Delivering Adelaide's North-South Corridor – Torrens to Darlington (T2D) project, road upgrades in Western Sydney, capacity and connectivity of Melbourne's outer metropolitan road network and highway upgrades in Perth, such as the Mitchell and Kwinana freeways, are prominent examples.

# Light rail and rapid bus infrastructure to connect centres, corridors and growth areas

are also important in moving cities efficiently and sustainably. Examples include delivering further stages of light rail for the Gold Coast, Parramatta and Canberra, enhancing and redesigning existing tram and bus networks in Melbourne and Adelaide, and improving rapid bus transit links for Western Sydney, Perth and Hobart.

Australian governments are continuing to co-invest in planning and delivery of efficient urban transport systems through the Federation Funding Agreement Schedule on Land Transport Infrastructure Projects (2024-2029). This includes major urban road projects such as Melbourne's North East Link, Adelaide's T2D and the M12 in Western Sydney. It also includes significant investments in major rail and rapid transit projects, including Direct Sunshine Coast Rail, Brisbane Metro, Sydney Metro Western Sydney Airport and METRONET.



#### SECURE, SUSTAINABLE WATER FOR GROWTH

# Generational water infrastructure investment is needed for secure, resilient supply to meet competing demands from housing, population and industry growth

The capacity, security and resilience of water is vital for Australia and requires investing in water and wastewater treatment, desalination, recycling, dams, weirs, pipelines and irrigation modernisation.

Ensuring cities have water and wastewater infrastructure to support increasing urban populations, especially to enable delivery of national housing targets, is essential. Water quality and security in regional areas is also a priority, including peri-urban, regional and remote parts of Victoria, New South Wales, South Australia, the Northern Territory and Western Australia.

Water is a critical enabler of economic opportunities in established and emerging industries, many of which are significant regional employers. This includes mining, advanced manufacturing and green hydrogen – for example in regional areas of Queensland, New South Wales, South Australia and Western Australia – as well as supply capacity

and efficient irrigation systems to support water-intensive agriculture in places such as the Northern Territory, Tasmania and Western Australia.

## Water supply and infrastructure must also be resilient to climate change and hazards,

such as drought, floods and extreme weather. This requires investing in dams, desalination, and flood mitigation projects.

This will build on existing Australian Government investment commitments to planning and delivery of new and upgraded water infrastructure. This includes through the National Water Grid Fund, such as Paradise Dam in Queensland, the Darwin Region Water Supply Infrastructure Program, Tasmanian Irrigation schemes and business cases for South Australia's Northern Water Supply and the Barossa, Clare Valley and Eden Valley. The Australian Government is also funding enabling infrastructure (such as connecting essential services like water, sewage, power, and community amenities such as community centres and parks) that supports new housing development through the Housing Support Program.



#### DELIVERING NET ZERO AND A CLEAN ENERGY ECONOMY

# Australia's transition to a net zero economy requires coordinated investments in ports, land transport, water and social infrastructure as well as clean energy

The net zero transition involves an immense delivery task to build the infrastructure to achieve national emissions reduction and renewable energy goals. The focus of this effort is the electricity generation, battery and pumped hydro storage, and transmission infrastructure across the 43 renewable energy zones (REZs) identified by Australian Energy Market Operator for the National Electricity Market. There are also vast economic opportunities to unlock in priority areas for net zero such as hydrogen, renewables exports and critical minerals.

For example, hydrogen hubs - largely close to established ports – are being developed in places such as Gladstone in Queensland, the Pilbara in Western Australia, Whyalla in South Australia and Melville Island in the Northern Territory. Critical minerals extraction, processing, export and manufacturing **opportunities** exist across regional Australia – from Queensland's North West Minerals Province, to northern and central-west New South Wales, northwest Victoria and across Tasmania, South Australia and Western Australia. These include strategic minerals like copper and zinc and critical minerals such as antimony, lithium, cobalt, vanadium and rare earth elements. For example, the Northern Territory offers manganese, copper, lithium and tungsten and plans to establish critical minerals processing and manufacturing at Middle Arm.

Infrastructure will be necessary to support delivery of REZ clean energy projects and other geographically associated economic opportunities in industries such as hydrogen, agriculture, advanced manufacturing and defence, and accommodate the growth and transition of regional workforces needed to support these. Infrastructure itself will also need to decarbonise – this is discussed further below under *Infrastructure decarbonisation and embodied carbon*.

In addition to acting as significant hubs for hydrogen production, storage and export, **ports are integral** to import supply chains for wind turbine components and the base from which offshore wind areas (such as those in Gippsland and Southern Ocean, Victoria, and Bass Strait in Tasmania) are installed and serviced.

Further, rail and road infrastructure improvements are required to enable transportation of over-sized, over-mass renewable components from ports to site — for example, in New South Wales routes from the Port of Newcastle to Central-West Orana, New England and Hunter-Central Coast REZs.

Water infrastructure will need to ensure sustainable supply to enable water-intensive net zero industries including green hydrogen production, mining operations and downstream minerals processing. Industrial processing and refining facilities are also needed for minerals processing, hydrogen production, storage and distribution, and other net zero economy opportunities such as battery manufacturing and recycling.



#### DELIVERING NET ZERO AND A CLEAN ENERGY ECONOMY

Transport and social (including housing, healthcare and education) infrastructure are also needed to attract and support regional workers across a range of industries in priority growth and development areas, including renewable energy, hydrogen, mining and advanced manufacturing. Examples include New South Wales Special Activation Precincts in priority locations such as Parkes and Wagga Wagga.

Broader changes in the economy are also creating emerging infrastructure demands and sustainability challenges. For example, accelerating investments in data centres and warehouses, driven by surging uptake of artificial intelligence and digitalisation of the economy, are energy- and water-intensive due to high electricity consumption, which converts to heat and demands significant water use for cooling.

Australian governments and private industry are already investing substantially in the net zero transition. In addition to significant Australian Government investments in renewables, including over \$30 billion in financing through the Clean Energy Finance Corporation and revenue underwriting projects through the Capacity Investment Scheme, other current commitments that may influence further enabling infrastructure requirements include:

- The \$4 billion Hydrogen Headstart program and \$500 million funding for hydrogen hubs in the Pilbara, Kwinana, Bell Bay, Port Bonython, north and central Queensland and the Hunter.
- National Reconstruction Fund support for minerals exploration and processing, battery and solar panel manufacturing and hydrogen electrolysers, and the \$566 million Resourcing Australia's Prosperity initiative for exploration of critical minerals, groundwater and other net zero resources.
- Planning funding for land transport improvements between the Port of Newcastle and REZs in New South Wales.

### **Future investment considerations**

This section highlights several critical considerations for the Australian Government when making new infrastructure investment decisions.

# When considering new infrastructure investments, the Australian Government should continue to consider:

- Market capacity for both labour and materials, with a focus on:
  - Existing and planned projects with similar and large material and labour needs for example, mega projects and tunnelling projects, across different sectors.
  - Existing and planned projects within a similar geographical area.
  - Geographical limitations on material and labour supply, particularly in regional locations projected for significant demand growth.
- Engaging with jurisdictions to:
  - Ensure an appropriate, sustainable balance of funding for nationally significant infrastructure between maintenance, renewal and investment in new infrastructure.
  - Ensure that proposals brought forward adequately consider resilience issues and address current and future climate-related risks to infrastructure.
  - Continue to embed consideration of emissions into infrastructure policy, planning and decisions, and implement measures to reduce embodied carbon in infrastructure, with regard to Infrastructure Australia's recommendations on reducing embodied carbon.

#### Construction industry sustainability and market capacity constraints

Changes in the national five-year major public infrastructure pipeline (2023–24 to 2027–28) compared to projections last year (for period 2022–23 to 2026–27) show that:

- There is a **significant geographical shift in investment to the north**, with Queensland and the Northern Territory major public infrastructure pipelines growing by \$16 billion, while New South Wales and Victoria have reduced by \$39 billion, versus the previous outlook period.
- The projected increase in demand for these northern areas would intensify local supply constraints, especially in regional areas where attracting skilled workers is challenging. It is also difficult to source construction materials, plant and equipment due to their geographical distance, adding risk to on-time, on-budget project delivery.
- At the national level, current market capacity issues and an inflationary environment are being
  actively managed. Accounting for the impact of cost escalations, and coupled with a softening of
  demand, the volume of workers required on the Major Public Infrastructure Pipeline alone has reduced
  by 20% across 2023–24 to 2027–28 compared to the previous five-year outlook period, helping to
  close the gap between supply and demand.
- There will be a **six-fold increase in renewable energy projects across all construction activity** in Australia over the next five years, most of which is funded by the private sector. Workforce preparedness is needed to deliver this jump demand for privately funded new energy projects.

Each year, Infrastructure Australia undertakes detailed analysis and demand projections of Australia's national major public infrastructure pipeline (MPIP) as part of its Market Capacity program. The MPIP covers projects valued over \$100 million in New South Wales, Victoria, Queensland and Western Australia, and over \$50 million in South Australia, the Australian Capital Territory, the Northern Territory and Tasmania.

The MPIP is currently valued at \$213 billion across the 5 years from 2023–24 to 2027–28. This represents an 8% drop in the last 12 months (compared to the demand projection last year for 2022–23 to 2026–27) and follows significant effort by governments to proactively manage infrastructure spending in light of market capacity constraints.

Public spending on major infrastructure works accounts for approximately 25% of the total construction market, estimated at over \$1.08 trillion over the five years from 2023–24 to 2027–28. Buildings (62%) dominates the total construction market, followed by transport (17%), utilities (11%) and resources (10%).

# Shifts by sector – decline in transport investment offset by growth in buildings and energy

**Transport infrastructure remains the largest public infrastructure expenditure category**, accounting for 59% of the MPIP (\$126 billion) over the five-year outlook (2023–24 to 2027–28). However, transport investment has reduced by 20% on the previous year's projections, driven by completions of mega-projects in 2023–24, fewer new projects commencing and cost changes for some mega projects in the outlook period.

The decline in public investment in transport is somewhat offset by **growth in the other sectors**. Buildings infrastructure investment (\$71 billion) has grown by 13% and accounts for 34% of the MPIP. While utilities infrastructure investment (\$16 billion) has grown by 60% and accounts for 7% of the MPIP. Growth in public utilities investment is driven by new energy projects, especially solar and wind farms.

#### Cost pressure and movement over time

The cost of construction materials continues to remain high with most materials experiencing year-onyear growth for three straight years. However, the rate of growth appears to have eased over the past twelve months, driven largely by drops in the price for some steel products.

Cost escalations on major infrastructure projects have largely been driven by rising materials cost pressures, which has increased by almost four times higher than labour cost increases over the last three years. Labour accounts for over 60% of costs on a land transport infrastructure construction project compared to under 40% on housing construction project.

Industry reports price escalation of non-labour inputs over the last 12 months of about 10-20%, and hold the view that prices are yet to peak.

**Concrete and steel** are the construction materials most critical to infrastructure delivery by volume and value, and **may be subject to cross-sector competition in the event of supply shortages**.

# Demand for labour continues to outstrip supply overall, with shortages to be felt more acutely by the energy sector and regional areas

The current infrastructure workforce stands at approximately 198,000 full time equivalent employees and is expected to grow steadily in future. Although there has been a reduction in projected worker shortages (-32,000) by almost 13% (October 2023 compared to October 2024), there is an estimated 197,000 shortfall of infrastructure workers this year. Shortages will prevail across all occupational groups and reflects broad shifts in the MPIP over the five-year outlook:

- By occupations, the engineer shortage is now passed peak demand as more projects move out of planning and design and into construction phase, while shortage of trades workers will continue to grow in future years.
- There will be a jump in labour demand from the private infrastructure sector, which has almost doubled over the last 12 months and is driven by renewable energy projects.

Changes to the size of the infrastructure workforce appears to be largely attributable to workers moving in and out of the construction industry, rather than between construction sectors (for example between infrastructure, housing or commercial/industrial construction). Efforts to grow the total construction workforce will benefit the infrastructure sector.

Nationally, workforce shortages appear to have peaked in capital cities but are projected to rise in regional areas (non-Greater Capital City Statistical Areas), which are expected to almost match current levels in capital cities in 2027. This demand growth is driven by the nation's energy transition, with the majority (89%) of planned government-funded solar and wind farms to be built in regional areas.

# Boosting construction industry productivity provides an opportunity to unlock for capacity

Construction multifactor productivity growth dropped to -0.8% in 2023, a decrease from 0.3% in 2022, continuing a 30-year trend. Boosting construction productivity is essential to delivering Australian governments' infrastructure ambitions in clean energy, housing, transport and other sectors.

Infrastructure Australia's 2024 Infrastructure Market Capacity report provides further analysis and advice.

#### Infrastructure resilience

States and territories have significant, diverse public infrastructure asset bases, which are growing in scale and complexity. **Jurisdictions report common issues with underfunded and reactive maintenance**, which impacts service delivery, asset lifespans, costs, financial sustainability and the resilience of assets and networks to increasing risks from severe weather and natural hazards.

Funding for new infrastructure is often prioritised over maintenance and renewal. However, many existing assets are ageing and under increasing pressure from constrained public finances, growing and changing demands, modernisation of services and standards, climate change, extreme weather, and the challenge of maintaining dispersed assets across vast geographical areas. Roads, social infrastructure (such as health, education and justice) and public housing feature prominently among ageing asset classes that are priorities for increased maintenance and renewals.

In our 2024 Annual Budget Statement, Infrastructure Australia recommended the Government give greater focus to funding maintenance and renewal of existing infrastructure assets alongside potential new investments. This recognises the growing challenges of ageing assets, maintenance liabilities, infrastructure resilience and the need for a more sustainable funding mix.

At the 2024–25 Budget, the Australian Government committed to **progressively increase annual funding for maintaining local roads under the Roads to Recovery Program** from \$500 million to \$1 billion. Under the Federation Funding Agreement Schedule on Land Transport Infrastructure Projects (2024–2029), the Government has also increased its funding to states and territories for maintenance on the National Land Transport Network, from \$350 million in 2023–24 to \$460 million in 2024–25.

Good asset data and information is critical to effective asset management and prioritisation of maintenance and renewals based on factors such as cost, criticality, performance and risk, but **asset data often lacks quality, accuracy and consistency**. This creates challenges in understanding risks and the scale or cost of maintenance needs and backlogs, efficiently allocating resources, promoting preventative approaches and making the case to invest in existing assets alongside new assets.

The increasing complexity of asset portfolios, growing demands for public infrastructure and fiscal and market constraints on delivery of new infrastructure to meet demands may strengthen incentives to upgrade and maximise the value of existing assets, evolve asset management policy and practice, and innovate how assets are used to improve efficiency and value.

#### Infrastructure decarbonisation and embodied carbon

Infrastructure is a major contributor to emissions and **Australian**, **state and territory governments recognise the need to reduce emissions from infrastructure and the built environment to achieve net zero targets**. Key areas of priority and action already underway through the infrastructure lifecycle include:

- Embedding consideration of emissions into infrastructure policy, planning and decisions, ensuring that decarbonisation is a key consideration in early project stages (such as the NSW Decarbonising Infrastructure Delivery policy), sustainability assessments for projects and use of sustainability rating tools.
- Driving adoption of low-emission construction materials and reducing more emissions-intensive inputs such as concrete and steel. This includes government procurement levers to create demand and influence markets, and growing domestic production capacity for low carbon materials.
- Incorporating circular economy principles into infrastructure to promote greater resource efficiency, maximise the value of materials and meet future infrastructure needs. This includes increasing uptake and developing markets for sustainable and recycled materials by adopting targets, standards and specifications and applying requirements in design, procurement and delivery.

Infrastructure Australia's 2024 Embodied Carbon Projections for Australian Infrastructure and Buildings report estimated the amount of upfront embodied carbon in Australia's pipeline of infrastructure and buildings is forecast to be between 37 Mt  $CO_2$ e and 64 Mt  $CO_2$ e per year in the five years to 2026–27. These emissions account for 7% of Australia's national emissions, with most of these emissions coming from the manufacture of construction materials.

The report presents practical strategies and recommendations to support infrastructure and built environment decarbonisation. These include switching to lower-carbon building materials and construction technologies, such as green steel or aluminium produced with 100% renewable electricity, as well as changing the way infrastructure and building projects are planned, designed and delivered to embed considerations of decarbonisation early.

Adopting the strategies and recommendations in the report would mean that, by 2026–27, Australia can reduce upfront emissions from the five-year construction pipeline by 23% at no additional cost. This is equivalent to a reduction of 9 Mt  $CO_2e$  – roughly 2% of Australia's gross national greenhouse gas emissions in 2022–23.

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